DOCUMENT RESUME

ED 346 067 SP 033 827

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TITLE Response Ability versus the Cult of Coverage.
PUB DATE 92
NOTE 21p.; Paper presented at the National Conference on Creating the Quality School (Norman, OK, March 30-April 1, 1992).
PUB TYPE Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Adjustment (to Environment); College Curriculum; *Curriculum Design; *Education Work Relationship; Futures (of Society); Higher Education; *Lifelong Learning; Mentors; Practicums; *Process Education; *Professional Education; Relevance (Education); Student Needs
IDENTIFIERS Content Area Teaching; Problem Oriented Instruction; *School Culture

ABSTRACT

Professions are changing rapidly and at an increasing rate, confronting professionals with an unprecedented requirement for adaptability and anticipation. The accelerated growth of knowledge relevant to professions and its relationship to curricula for preparing professionals has been referred to as the "cult of coverage." School culture requires that, insofar as possible, every aspect of the profession be covered in both didactic and practicum components of the curriculum. This paper examines content-based and problem-based approaches to professional learning. Questions about what is truly essential are discussed and recognition given to the fact that students need not learn everything within the confines of the school. Apprenticeships, mentor programs and other real-life educational opportunities are becoming available while learning as a lifelong process is being acknowledged as well. When today's students are in mid-career, practice will be different, therefore, students need to learn to adapt and handle not only well defined situations, but also difficulties and anomalies that will be encountered in the future. (Author/LL)

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RESPONSE ABILITY VERSUS THE CULT OF COVERAGE

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Presented at The National Conference
on "Creating the Quality School"

March 30 - April 1, 1992

Center for the Study of Small/Rural Schools
Norman, Oklahoma

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RESPONSE ABILITY VERSUS THE CULT OF COVERAGE

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Abstract

Professions are changing rapidly and at an increasing rate, and professionals are confronted with an unprecedented requirement for adaptability and anticipation. When today's students are in midcareer, practice will be different. Professional preparation and maintenance programs are struggling to keep abreast of changes that already have significantly affected the competence that graduates and practitioners must exhibit. Educators must find ways to help future professionals prepare for the practice of the future.

The accelerated growth of knowledge relevant to professions and its relationship to curricula for preparing professionals has been referred to as the "cult of coverage." To conscientious faculty members, the temptation to cram more information into less time is almost irresistible. School culture requires that, insofar as possible, every aspect of the profession be "covered" in both the didactic and practicum components of the curriculum.

The amount of new relevant information generated each year, combined with the belief that everything must be covered, has resulted in an unbalanced curriculum. The part of the curriculum concerning the acquisition of information has grown at the expense of other desirable outcomes.

The issues confronting us today in education are systemic ones involving methods, professional and faculty preparation, curricula, bureaucratic strangle-holds, shifting cultural values, and shattering global concerns. The task at hand is not a piecemeal reform, but rather dynamic educational innovations.

This paper examines approaches to learning for professionals. Questions about what is truly essential will be discussed as well as recognition of the fact that students need not learn everything within the confines of the school. Apprenticeships, mentor programs and other real-life educational opportunities are becoming available while learning as a lifelong process is being acknowledged as well.

RESPONSE ABILITY VERSUS THE CULT OF COVERAGE

> A state of perfection ... is a state of absolute satisfaction. As such, it is a state in which no change is possible: No change is needed: the need for change does not exist.
>
> DeFer, 1980, p.13

The life of man is indeed composed of these two situations: of needs for which the old satisfactions now become insufficient and needs for which there is no available satisfaction yet. Man is constantly confronted with these two situations because the need for satisfaction, for initial satisfaction or greater satisfaction, is constantly with him and nothing that he can do will ever overcome this need.

The same thing that originally was capable of satisfying our need will prove to be, with the passage of time - often the short passage of time - no longer capable of satisfying our need. From satisfaction we pass to dissatisfaction. The object or unit is the same. But the degree of satisfaction has changed; from positive it has now become negative.

The instrument and the effort in his endeavor to attain perfection is the ability for change by passing from insufficient or non-existing satisfactions to sufficient satisfactions which inevitably will become insufficient, and so on.

The previous concepts come from the discipline of metaphysics. When one moves to the field of Psychotherapy, according to Glasser (1965, 1985), we all have the same needs but we vary in our ability to fulfill them. Glasser and others hold

that the problem is rather an incapacity or failure at the interpersonal social level of human functioning. Glasser claims that people do not act irresponsibly because they are ill. Rather, they are ill because they act irresponsibly.

This concept can be defined as the ability to fulfill one's needs and to do so in a way that does not deprive others of the ability to fulfill their own needs. Since situations vary, perhaps another way to refer to this concept is by rewriting the word by breaking it into its parts - response ability.

Adaptation is considered here as the process by which individuals alter their response patterns in relation to change either in or perceived in the surrounding environment. The world around us changes constantly. We are required to modify our behavior to the realities of the environment in order to survive both physically (i.e., relating to food, warmth, etc.) which is adaptation and deals predominately with the external, and psychologically (i.e., need to belong, be loved, etc.) which is adjustment and deals predominately with the internal.

Human learning capacity provides us with a basis for ongoing adaptation to the environment which is almost limitless. However, our emotional and psychological needs constrain the adaptive range within which our learning ability can operate.

Although we are given unchanging needs from birth to death, as Glasser has claimed, needs which if left unsatisfied cause us or others to suffer, we are not naturally endowed with the ability to fulfill them. Ability must be learned. Response

ability can be learned and at any age, but it appears to be easier at an early age rather than having to overcome bad learning later.

Bruner, Goodnov, and Austin (1967) begin with the assertion that the environment is so tremendously diverse, and we as humans are able to discriminate so many different objects, that were we to utilize fully our capacity for registering differences in things and respond to each event encountered as unique, we would soon be overwhelmed by the complexity of our environment. In order to cope with the complexity we engage in the process of selecting.

This process Atchely calls "habituation" (1988, p. 242). It is learning not to pay attention. Habituation is vital in early childhood because it allows us to ignore most environmental stimuli and to concentrate our attention, and thus is an important prerequisite for learning. Habituation is a way of ignoring millions of small changes that occur in both self and environment. To the extent that people live in familiar surroundings and experience only very gradual changes in themselves, habituation may cause them to perceive very little need to adapt. Optimal habituation is somewhere between being so over-habituated that no adjustment seems needed and being so under-habituated that every small change seems to require attention. Habituation generally lowers the perceived need for attention and adjustment, and may increase with age.

It can be seen that the successful employment of the orientation which the individual brings to the situation means that much of the data of the situation may be ignored or suppressed. However since an orientation does not prepare an individual to deal with a particular situation but only with a category or kind of situation, much of the suppressed data may well be relevant. Moreover, every successful use of an orientation reinforces the tendency both to use it again, and to do so without correcting it by relevant data.

Educational Approaches

The above mentioned concepts hold true for our thoughts about educational approaches and how education should be delivered. Both are colored by our past experiences and the orientation we bring to the educational situation. Individuals involved in teaching students often do so using the same methods as they experienced in their own education. In professional training programs, that education is usually in the form of didactic, lecture methods interspersed with some laboratory sessions followed in some professions by a practicum phase. Over the years, new approaches to education have emerged from periods of concern about the efficacy of education to do its job. Often what follows is a period of rejection of the dominant education model and a call for a new approach. The rejection of the old is often so strong that adopting new approaches takes on a fervor of "faddism", clinging and "buying into" new approaches driven primarily by the avoidance of the old.

Occupations and professions are changing rapidly and at an increasing rate, and those in the workplace are confronted with an unprecedented requirement for adaptability and anticipation. When today's students are in midcareer, practice will be different. The knowledge which must now be gained to be competent in just about any area has grown greatly. This knowledge explosion becomes further complicated in the practice arena where educators now talk about knowledge in terms of "half life", or the period of time before half of what one learns in school is obsolete.

Questions about what is truly essential are emerging, and recognition is given to the fact that students need not learn everything within the confines of the school (Eisner, 1985). Apprenticeships, mentor programs, and other real-life educational opportunities are becoming available while learning as a lifelong process is being acknowledged as well.

However, the model that still has widespread usage in which education is traditionally being handled focuses first and foremost on content to be learned. In the recent report by the Pew Foundation (1989) it was stated that the professional education program is organized and managed as if the accumulation of facts is the primary purpose of professional education (p.135). Further, most national and state board examinations as well as those of specialty boards attempt to evaluate almost entirely upon the basis of how much information has been accumulated.

The accelerated growth of knowledge relevant to professions and occupations and its relationship to curricula for preparing individuals for the future has been referred to as the "Cult of Coverage" by Armistead (1987). To conscientious educators, the temptation to cram more information into less time is almost irresistible. School culture requires, insofar as possible, every aspect of the content to be "covered" somewhere in the curriculum. Faculty are willing to condense subjects, but they steadfastly believe that everything must be covered in both the didactic and the practicum components of the curriculum (Paprock, 1990).

In one curriculum studied by Ward and Bushby (1987) in which learning outcomes required for completion have been specified, there are over 216,000 objectives which must be completed in the three year preclinical curriculum. this represents one new item to learn every six minutes, twenty-four hours per day, seven days per week for three years.

The result of this type of content-focused curriculum has caused some professional schools to pursue alternative approaches. Kaufman (1985) states that too often students perceived their teachers as adversaries rather than colleagues. He quotes a student as saying,

> I listen to their lectures and take their tests in a large anonymous lecture hall. But I don't get close to many of the faculty. I feel like I'm always on trial, jumping through hoops, yet not worthy of their trust.

Kaufman goes on to show how students view their coursework in this setting by quoting another student,

> I don't see the point of all this material they're throwing at us. They don't connect it with...any real problems. But I'm not going to make waves. I'm just going to get through (p.1).

Besides the obvious problems of overwhelming and sometimes not relevant information in an approach focusing on content, Revans (1983) notes that we all have numerous acquaintances who know all manner of things without being able to do them. The danger here is that these content laden curriculum aim at the simple dissemination of a body of information. The emphasis is at the lower levels of cognitive processes - possession of information and comprehension. The tacit value position embedded in the cognitive taxonomy of learning objectives is that educational objectives should be developed so that they traverse the entire range of cognitive functioning.

Within the curriculum field a variety of programs have been designed that are directly related to the belief in the primacy of cognitive development as an aim of education. Eisner (1985) cites examples such as: Science; A process approach, Elementary school science, and Bruner's The process of education. What seems to be resurrected on a continuous basis is what I would term "a new set of old ideas". For example, Bruner's work is an example of a hybrid orientation that marries forms of inquiry used in the natural and social sciences with specific academic disciplines. What this and other curriculum orientations have in common is their emphasis on using curricular tasks as a means of fostering processes that presumably will outline the problems or concepts they were developed from. The major aims of these problem-driven

This leads to a second model or approach to education which is the curriculum used would generally be problem centered. Programs is the development of intellectual power rather than the simple dissemination of a body of ideas or information.

That is, students are encouraged to define problems they wish to pursue, and with the teacher's help the appropriate materials and guidance are provided. An example of this approach is one developed by Barrows (1985). His approach, put simply, is that the purpose of problem-based learning is to produce students that have both knowledge and the ability to use that knowledge by providing a context and guidance. Heavy emphasis in his program is placed on teaching students to be self-directed learners by tackling problems presented by faculty or in a clinical setting. Although this approach has gained some popularity, especially in medical education, Rogoff and Lave (1984) and Lave (1988) found that faculty and students are often less comfortable with academic problems in the program which may determine what kinds of responses are adaptive or maladaptive in given situations. But comfort at the cost of reality is no virtue.

On the positive side, Rogoff and Lave claim that if we wish to prepare students to solve problems they will confront in their lives or in practice, then we must present realistic simulations of real problems not merely with problems that are tailored to our convenience because they are objectively scorable or have been removed from context. What we must do is supplement what we have and make it better.

In the problem-based approach the cognitive taxonomy is entered at the third level - application. This approach forces the student to gain the necessary knowledge or information and the analytical ability to react as learning issues arise.

The content-based and the problem-based approaches closely resemble the first two of three models of learning approaches presented by Farmer (1983). Farmer collected data through observation and interviews with 450 learners and instructors. The focus of this study was on what differentiates meaningful from meaningless learning experiences. In this regard Farmer found it useful to use Ausubel, Novak, and Hanesian's (1978) view of learning being in three forms: reception learning, guided inquiry, and autonomous learning. All three forms of learning can range from being meaningful to meaningless. Meaningful is defined as learning in which individuals are helped to acquire needed knowledge, attitudes, and skills to help them to solve real-life problems that range from well-defined to ill-defined. It was found that education that was meaningful clustered around three areas of focus: content, specific problem or task, and change (see figure 1)(Farmer, 1983; Paprock, 1986). These areas of focus can possibly be used in viewing the interaction between learning and performance from a different perspective than currently viewed with existing concepts by educators.

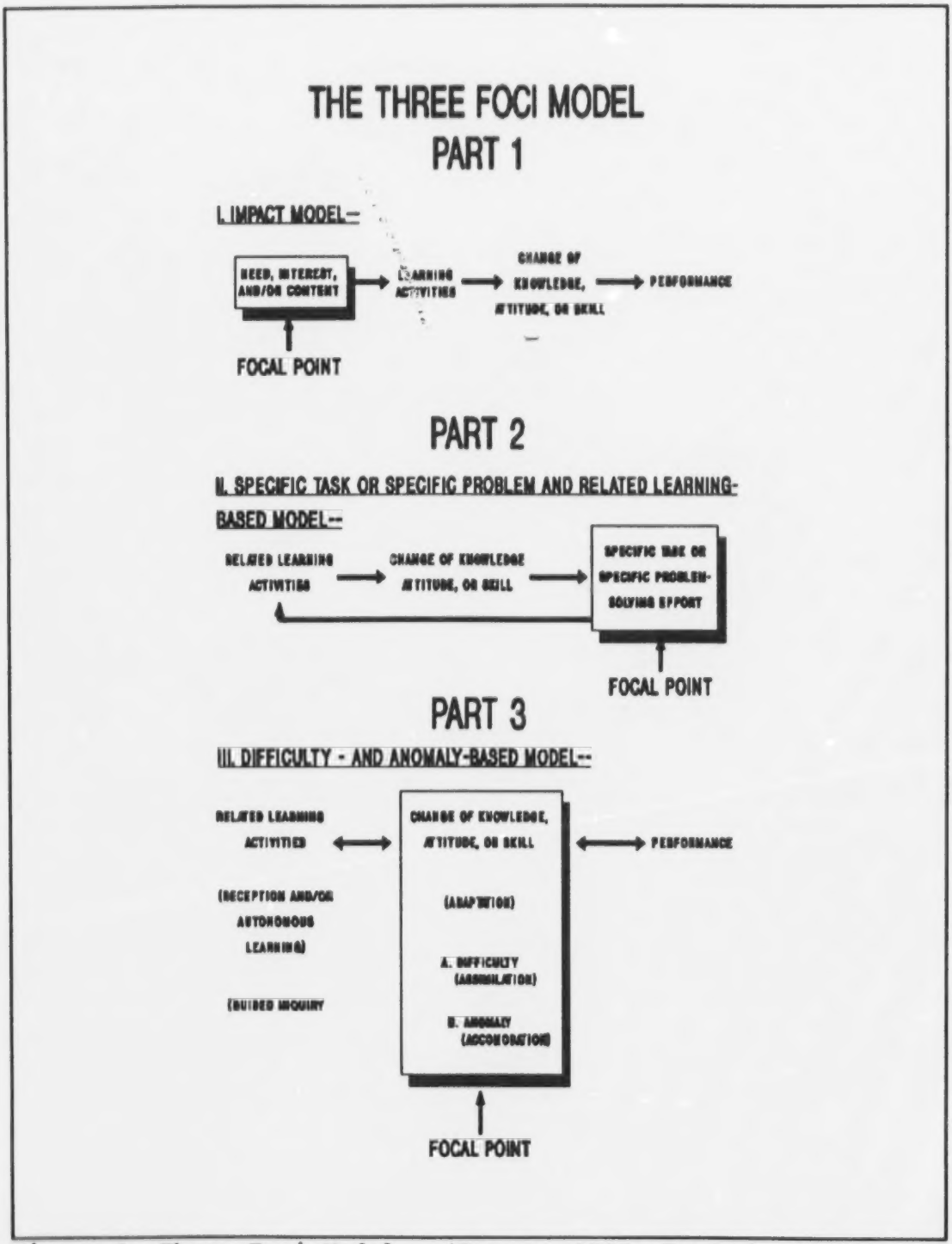

Figure 1: Three Foci Models, (Farmer, 1983; Paprock, 1986).

The relationship between these models and previous discussion seems obvious. But the third model needs some explanation. The third model focuses first and foremost on adaptation necessitated by change brought about by human development, changes in the knowledge base, organizational change, and/or societal change; adaptation can be in the form of the need to assimilate - to learn to deal with difficulties without needing to change one's theory base, paradigm, or perspective - or to accommodate - to change one's theory base, paradigm, or perspective.

This approach requires identifying and prioritizing difficulties and anomalies to be addressed educationally. Anomalies require a special form of guided inquiry. That form entails: (1) establishing the problem; (2) the mentor, with or without the learner, establishes the goal; (3) the mentor, with or without the learner, arrays relevant concepts or choices; (4) the learner relates the previous 1 and 3 under the mentor's guidance; (5) the mentor, with or without the learner, evaluates the process and/or the product; and (6) discussion.

To understand the anomaly-based approach, one must consider situations in which the person may find him or herself and the adequacy of his or her dealing with those situations. Such situations can involve the person personally, vocationally, and/or avocationally. It can involve groups, organization, community, and/or society. Regarding the person's ability to deal

with such situations adequately from his or her own or others' perspectives:

a) Some situations provide no difficulty for the person. The person can deal with those situations adequately, using his or her current knowledge, attitudes, and skills.

b) Some situations provide a person with difficulties. A difficult situation is one in which the use of one's current knowledge, attitudes, and skills is almost adequate for dealing with the situation. To learn to deal with the difficulty adequately, one needs to modify slightly one's current knowledge, attitudes, and skills. But one does not need to modify one's frame of reference.

c) Some situations, however, are anomalous. An anomaly is a situation with which one cannot deal adequately without dropping one frame of reference and changing to a different one which is adequate for use in dealing with the situation.

Implications for needs assessment and program development when considering these situations may be:

a) It is essential for those who deal with curriculum to identify which of the three models or combinations of them are most required in a particular situation. They can do so with the assistance of instructors and learners, but they need to independently validate such

information because both instructors and learners can inadvertantly become involved in an inappropriate model under certain circumstances that leads to less than meaningful learning. (Paprock, 1990).

b) To the extent that the content focus model or the difficulty-based part of the third model are called for in a situation, various forms of reception learning (i.e., reading, hearing, or observing) tend to be the instructional treatments of choice.

c) Guided inquiry tends to be the most appropriate way for persons to learn to deal with anomalous situations.

Implications for Practice

Professions, like society as a whole, are in a constant state of dynamic change. For the individual such changes often demand significant reform in the nature of one's practice or in the very way in which one views the field. This type of change relates to an anomalous situation. Houle (1981) claims that such changes can cause a profession to make profound alterations in its delivery system or even to reconceptualize its collective mission.

If taken seriously by professionals and students, anomalies provide a sort of cognitive conflict like a Kuhnian state of crisis that prepares the individuals' conceptual frames for an accommodation. Situations are not crises if normal behavior produces improvements. Crises are dangerous, in part, because

normal behaviors make them worse. Crises call for strategic reorientations or "paradigm shifting".

If we as educators aim to produce rationally-based conceptual change, then according to what was said so far, the content of courses should be such that it renders theory intelligible, plausible, relevant, and meaningful. In order to give expression to these requirements more emphasis needs to be given to assimilation and accommodation by professionals and students of that content than to content "coverage."

Teaching strategies are typically thought of as clarifying content presented in texts, explaining solutions to problems, demonstrating principles, providing laboratory exercises, and testing for recall of facts and ability to apply knowledge to problems. That is, teaching is for recall and assimilation. Accommodation needs to be seriously considered for future strategies. For teaching aimed at accommodation the following possible changes in approach are implied here: 1) Develop teaching methods (i.e., lectures, labs, etc.) which can be used to create cognitive conflict as preparation for an accommodation; 2) Organize instruction so there is more time in diagnosing errors in thinking and resistance to accommodation; 3) Retrain teachers to the kinds of strategies which they can include in their repertoire to deal with errors that interfere with accommodation; 4) Help students to make sense of content by representing content in multiple modes (e.g., visual, mathematical, concrete and the like); Help students see

interrelationships of modes and ideas; and 5) Develop evaluation methodologies to help teachers track the conceptual change.

The teacher as clarifier of ideas and presenter of information is clearly not adequate for helping students accommodate new conceptions. Teachers may need to assume the role of an adversary in the sense of the Socratic tutor, and avoid establishing an adversarial role with regard to new or foreign ideas by students.

There is a great reluctance to acknowledge that the conditions of meaningful learning mentioned also apply to problem-solving methods (Paprock, 1990). Performing in a clinic or laboratory experiments in cookbook fashion without understanding the underlying substantive and methodological principles involved confers little appreciation of the scientific method. Neither does "discovering" correct answers to problems without understanding what one is doing add to knowledge or problem-solving (response) ability. Students accomplish this later feat merely by rotely memorizing "type problems" and mechanical procedures. Nevertheless, it must be recognized that labs and problem-solving are meaningful experiences if built upon constituent operations that are themselves meaningful and relevant.

In summary, many writers have discussed some of the concepts mentioned in this paper. Toffler (1974) in Learning for Tommorrow comments on the cult of coverage by using the term "overchoice", and states that "there is so much that could be taught that it is

almost impossible to decide what should be taught "(p.105). Toffler goes on to point out that parents expect the schools to fit their children for life in the future. It is clear that the educator must continue to attack the problem of overchoice by deciding what to exclude and what to include. To do this, according to Toffler, "he must select concepts that are highly generalized and of wide application: What is change? What ideas will be useful to the student in coping with change? What is changing? What kinds of conflicts take place over change? Will they continue to take place? What is slow to change? How do we agree on what should be changed? "(p.106).

What kind of adult will be necessary in the future was described by Tough (1971) twenty years ago, " The adult learner of the future will be highly competent in deciding what to learn, in planning and arranging his own learning. He will successfully diagnose and solve almost any problem or difficulty that arises. He will obtain appropriate help competently and quickly, but only when necessary "(p. 170).

There has been for some time a feeling that there is a need for students to learn to adapt and handle not only well-defined situations, but also difficulties and anomalies that they will encounter.

REFERENCES

Armistead, W.W., (1987).Factors Inhibiting Implementation of the Ideal Program for Veterinary Medical Education. Journal of Veterinary Medical Education. 14: 56-59.

Atchley, R.C., (1988). Social forces and aging 5th ed., Belmont, CA: Wadsworth Publishing Company.

Ausubel, D.P., Novak, J.D., and Hanesian, H.,(1978). Educational psychology: A cognitive view. New York: Holt, Rinehart and Winston.

Barrows, H.S., (1985). How to design a problem-based curriculum for the preclinical years. New York: Springer.

Bruner, J., Goodnov, J., and Austin, G., (1962). The study of thinking. New York: Science Editions, Inc.

Current status and future directions for veterinary medicine. (1989). Phase I, Pew National Veterinary Education Program, Draft report.

De Fer, H., (1980). The metaphysics of inventiveness. Albuquerque: American Classical College Press.

Eisner, E.W., (1985). The educational imagination: On the design and evaluation of school programs. 2nd ed., New York: Macmillan.

Farmer, J.A., Jr., (1983). Continuing medical education: Measurement issues on trial. Paper presented at a conference on research in medical education. American Association of Medical Colleges (AAMC), Washington, D.C.

Glasser, W., M.D., (1985). Control theory in the classroom. New York: Harper & Row Publishers.

Glasser, W., M.D., (1965). Reality therapy. New York: Harper & Row Publishers.

Houle, C., (1981). Continuing learning in the professions. San Francisco: Jossey-Bass Publishers.

Kaufman, A., M.D., (1985). Implementing problem-based medical education: Lessons from successful innovations. New York: Springer.

Lave, J., (1988). Cognition in practice. New York: Cambridge University Press.

Paprock, K.E., (1990). Report on the pilot study assessing methods to improve teaching and faculty evaluation in the clinical setting. College of Veterinary Medicine, Texas A&M University.

Paprock, K.E., (1986). Efforts on the part of hospital personnel to learn about and cope with diagnostic related groups (DRGs). Unpublished doctoral dissertation, University of Illinois at Urbana-Champaign.

Revans, R.W., (1983). Action learning: The forces of achievement, or getting it done. Management Decisions. (21) 3, 44-54.

Rogoff, B. and Lave, J. (1984). Everyday cognition: Its development in social context. Cambridge: Harvard University Press.

Toffler, A., (1974). Learning for tomorrow: The role of the future of education. New York: Vintage Books.

Tough, A. (1971). The adults' learning projects: A fresh approach to theory and practice in adult learning. Toronto: OISE.

Ward, B.C. and Bushby, P.A. (1987). Veterinary education in an information age. Journal of Veterinary Medical Education. 12, 39-41.